

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) In a communication system comprising at least two peers that communicate with each other across an intermediate network comprising at least one infrastructure element, a method for an infrastructure element of the at least one infrastructure element to establish communications between two peers of the at least two peers, the method comprising:

monitoring at least a portion of messages exchanged between the two peers for control messages, wherein the control messages comprise one or more parameters;

storing at least ~~some~~ one of the one or more parameters ~~corresponding to~~ of the control messages exchanged between the two peers to ~~provide~~ produce a stored parameters;

~~detecting occurrence of~~ determining that a received control message is a retransmission of a control message from one of the two peers, wherein the retransmission of the control message will lead to duplicate negotiations between the two peers; and

processing the retransmission of the control message and sending a valid proxy response ~~based on~~ comprising the stored parameters such that the duplicate negotiations are avoided between the two peers.

2. (Original) The method of claim 1, wherein the control messages comprise point-to-point protocol control messages.

3. (Original) The method of claim 1, wherein the communication system comprises a wireless communication system, the at least two peers comprising at least one wireless communication unit in communication with at least one interworking unit via the intermediate network, and wherein the control message is sent from a wireless communication unit of the at least one wireless communication unit.

4. (Original) The method of claim 1, wherein the communication system comprises a wireless communication system, the at least two peers comprising at least one wireless communication unit in communication with at least one interworking unit via the

intermediate network, and wherein the control message is sent from an interworking unit of the at least one interworking unit.

5. (Original) The method of claim 1, wherein processing of the retransmission of the control message further comprises discarding the retransmission of the control message.

6. (Previously Presented) The method of claim 1, wherein processing of the retransmission of the control message further comprises generation of a valid proxy response based on the stored parameters.

7. (Original) The method claim 1, further comprising, prior to detecting the retransmission of the control message:

- detecting transmission of data by each of the two peers; and
- discarding the stored parameters in response to detecting the transmission of data by each of the two peers.

8. (Previously Presented) A digital storage device having stored thereon computer-executable instructions for carrying out the method of claim 1.

9. (Currently Amended) In a communication system comprising at least two peers that communicate with each other across an intermediate network comprising at least one infrastructure element, a method for an infrastructure element of the at least one infrastructure element to establish communications between a first peer and a second peer of the at least two peers, the method comprising:

- receiving from the first peer, a request control message targeted to the second peer;

- ~~storing parameters from the request control message to provide stored request control message parameters;~~

- forwarding the request control message to the second peer;

- receiving from the second peer, a response to the request control message;

- storing at least one parameter from the response to the request control message to produce a stored parameter;

receiving, from the first peer, a retransmission of the request control message targeted to the second peer; and

processing the retransmission of the request control message and sending a valid proxy response to the first peer comprising ~~based on~~ the stored ~~request control message~~ parameters.

10. (Original) The method of claim 9, wherein the request control message and the retransmission of the request control message comprise point-to-point protocol control messages.

11. (Original) The method of claim 9, wherein processing of the retransmission of the control message further comprises discarding the retransmission of the control message.

12. (Previously Presented) The method of claim 9, wherein processing of the retransmission of the control message further comprises generation of a valid proxy response based on the stored request control message parameters.

13. (Original) The method of claim 9, further comprising, prior to receiving the retransmission of the first request control message:

detecting transmission of data by each of the first peer and the second peer; and
discarding the stored request control message parameters in response to detecting the transmission of data by the first peer and the second peer.

14. (Previously Presented) A digital storage device having stored thereon computer-executable instructions for carrying out the method of claim 9.

15. (Currently Amended) An apparatus for use in an intermediate network forming a part of a communication system, the communication system comprising at least two peers that communicate with each other across the intermediate network, the apparatus comprising:

at least one processor; and

at least one storage device, coupled to the at least one processor, having stored thereon instructions that, when executed by the at least one processor, cause the at least one processor to:

monitor at least a portion of messages exchanged between two peers of the at least two peers for control messages, wherein the control messages comprise one or more parameters;

store, in the at least one storage device, at least ~~some~~ one parameter of the one or more parameters corresponding to the control messages exchanged between the two peers to ~~provide~~ produce a stored parameters;

~~detect occurrence of~~ determine that a received control message is a retransmission of a control message from one of the two peers, wherein the retransmission of the control message will lead to duplicate negotiations between the two peers; and

~~processing~~ the retransmission of the control message and ~~sending~~ a valid proxy response ~~based on~~ comprising the stored parameters such that the duplicate negotiations are avoided between the two peers.

16. (Original) The apparatus of claim 15, wherein the control messages comprise point-to-point protocol control messages.

17. (Original) The apparatus of claim 15, wherein the at least one storage device further comprises instructions that, when executed by the at least one processor, cause the at least one processor to:

process the retransmission of the control message by discarding the retransmission of the control message.

18. (Previously Presented) The apparatus of claim 15, wherein the at least one storage device further comprises instructions that, when executed by the at least one processor, cause the at least one processor to:

process the retransmission of the control message by generating a valid proxy response based on the stored parameters.

19. (Original) A base station controller embodying the apparatus of claim 15.

20. (Original) A mobile switching center embodying the apparatus of claim 15.